K112697

Premarket Notification - Special 510(k) Charger™ PTA Balloon Dilatation Catheters

# 510(k) Summary

Submitter:

**Boston Scientific Corporation** 

One Scimed Place Maple Grove, MN 55311

**Contact Person:** 

Glenn Jacques 763-494-1152

**Phone Number:** Fax Number:

763-494-2222

**Date Prepared:** 

September 15, 2011

Device Trade Name: Charger PTA Balloon Dilatation Catheters

Common Name:

Percutaneous Transluminal Angioplasty Dilatation Catheter Device Classification: Class II 21 CFR 870.1250 Product Code: LIT, DQY

#### **Predicate Devices**

Mustang PTA Balloon Dilatation Catheters

#### **Device Description**

The Boston Scientific Charger™ Percutaneous Transluminal Angioplasty (PTA) Balloon Dilatation Catheter is an over-the-wire (OTW) balloon catheter with a dual lumen shaft design. One lumen marked "WIRE" is used to pass the catheter over 0.035" (0.89mm) guidewires. The second lumen marked "BALLOON" communicates with the balloon and is used to inflate and deflate the balloon during the procedure. The guidewire lumen and the balloon lumen terminate at the proximal end of the catheter in a Y-connector manifold with luer lock fittings. There are two radiopague marker bands located under the balloon shoulders to aid in positioning the system during the procedure. A coating is applied to the balloon to enhance insertion and withdrawal performance. The tip of the catheter is gradually tapered to facilitate advancement of the catheter through the stenosis.

The Charger™ Balloon Dilatation Catheter will be available with balloon diameters 3.0 mm to 12.0 mm, balloon lengths 20 mm to 200 mm and with shaft lengths of 40 cm. 75 cm, and 135 cm.

#### Indications for Use

The Charger Balloon Dilatation Catheter is indicated for Percutaneous Transluminal Angioplasty (PTA) in the peripheral vasculature, including iliac, femoral, popliteal, tibial, peroneal, subclavian, and renal arteries and for the treatment of obstructive lesions of native or synthetic arteriovenous dialysis fistulae.

The Charger Balloon Dilatation Catheter is also indicated for post-dilatation of balloon expandable and self-expanding stents in the peripheral vasculature.

## Substantial Equivalence

The Charger PTA Balloon Dilatation Catheters design, materials, manufacturing process and intended use are substantially equivalent to the predicate device Mustang™ Balloon Dilatation Catheters (K103751).

# **Comparison of Technological Characteristics**

The Charger PTA Balloon Dilatation Catheter incorporates substantially equivalent device materials and design, packaging materials and design, fundamental technology, manufacturing processes, sterilization processes and intended use as those featured in the Boston Scientific predicate device Mustang™ Balloon Dilatation Catheters (K103751).

Comparison to Predicate Devices in Materials and Manufacturing

Manifold   Same material. Different colorant. Same design serving same function	nparison to Predicate Devices	s in Materials and Marturactu
Strain Relief  Strain Relief  Same material. Same design serving same function  Same material. Different colorant/additive. Same design serving same function  Same material. Different colorant/additive and serving same function  Same material, different colorant/additive and serving same function  Same material. Different colorant/additive and serving same function  Same material. Different colorant. Same design serving same function  Same balloon material and design and serving same function and fundamental technology  Same bonding method and function  Same forming method and function  Same component serving same function  Same coating serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer	Characteristic	Mustang predicate
Strain Relief   design serving same function	Manifold	colorant. Same design
Catheter Proximal Shaft / Distal Outer  Catheter Inner Shaft  Same material, different colorant/additive and serving same function  Same material. Different colorant. Same design serving same function  Same balloon material and design and serving same function and fundamental technology  Same bonding method and function  Same forming method and function  Same component serving same function  Same coating serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Catheter Inner Shaft  Same material, different colorant/additive. Same  Same material. Different colorant. Same function  Same balloon material  Same forming method and function  Same coating serving same function.  Same material and similar design both serving same function.  Proximal Shaft Outer	Strain Relief	design serving same
Catheter Inner Shaft  Colorant/additive and serving same function  Same material. Different colorant. Same design serving same function  Balloon  Balloon Bonding Method  Balloon Forming Process  Marker Bands  Coating  Balloon Protector  Costmal Shaft Outer  Colorant/additive and serving same function  Same material. Different colorant. Same design and serving same function  Same balloon material and function  Same bonding method and function  Same forming method and function  Same component serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer		colorant/additive. Same design serving same
Bumper Tip  Balloon  Balloon  Balloon Bonding Method  Balloon Forming Process  Marker Bands  Coating  Balloon Protector  Balloon Protector  Costing  Costing  Colorant. Same design and serving same function and fundamental technology  Same bonding method and function  Same forming method and function  Same component serving same function  Same coating serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer	Catheter Inner Shaft	colorant/additive and
Balloonand design and serving same function and fundamental technologyBalloon Bonding MethodSame bonding method and functionBalloon Forming ProcessSame forming method and functionMarker BandsSame component serving same functionCoatingSame coating serving same functionBalloon ProtectorSame material and similar design both serving same function.Proximal Shaft OuterSame shaft outer	Bumper Tip	colorant. Same design
Balloon Forming Process  Marker Bands  Coating  Balloon Protector  Balloon Protector  Balloon Protector  Same component serving same function  Same coating serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer	Balloon	and design and serving same function and
Process and function  Marker Bands Same component serving same function  Coating Same coating serving same function  Balloon Protector Same material and similar design both serving same function.  Proximal Shaft Outer Same shaft outer	Balloon Bonding Method	
Same function  Coating  Same coating serving same function  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer		
Balloon Protector  Balloon Protector  Same material and similar design both serving same function.  Proximal Shaft Outer  Same shaft outer	Marker Bands	
Balloon Protector similar design both serving same function.  Proximal Shaft Outer Same shaft outer	Coating	
	Balloon Protector	similar design both

Comparison t	n Predicate	Devices	Characteristics
Combanson	o Fredicale	Devices	Characteristics

Characteristic	Mustang predicate
Balloon Diameters	Same balloon diameter range serving same function
Balloon Lengths	Same balloon length ranges serving same function
Rated Burst Pressure (RBP)	Similar rated burst pressure
Catheter Length	Same catheter length ranges serving same function
Recommended Introducer Sheath Compatibility	Similar ranges and compatibilities
Recommended Guidewire	Same compatibility.
Sterilization Method	Same method.
SAL	Same level of assurance
Packaging Material and Configuration	Same design and function

### Performance Data

Biocompatibility testing and bench testing were performed to support a determination of substantial equivalence. The results of these tests provide reasonable assurance that the proposed device has been designed and tested to assure conformance to the requirements for its intended use. No new safety or performance issues were raised during the testing.

The following biocompatibility tests were completed on the Charger PTA Balloon Dilatation Catheter:

MEM Elution / Cytotoxicity

Guinea Pig Maximization Sensitization

Intracutaneous Reactivity

Acute Systemic Toxicity

Materials Mediated Rabbit Pyrogen

Hemolysis Direct Contact and Extract

Complement Activation

Partial Thromboplastin Time

In Vitro Hemocompatibility

Bacterial Mutagenicity (Ames Assay)

Mouse Lymphoma Assay

**USP Physiochemical** 

Latex

Premarket	Notification -	Special 5	10(k)
Charger™	PTA Balloon	Dilatation	Catheters

The following in-vitro performance tests were completed fo	r the Charger
PTA Balloon Dilatation Catheter as part of a Special 510k:	-

**Bond Tensile** 

# Conclusion

Based on the indications for use, technological characteristics, safety and performance testing, the Charger Balloon Dilatation Catheter has been shown to be appropriate for its intended use and is considered to be substantially equivalent to the Boston Scientific Mustang™ Balloon Dilatation Catheters (K103751).





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

NOV 3 0 2011

Boston Scientific Corporation c/o Glenn Jacques One Scimed Place Maple Grove, MN 55311

Re: K112697

Trade/Device Name: Charger<sup>TM</sup> PTA Balloon Dilatation Catheter

Regulation Number: 21 CFR 870.1250 Regulation Name: Percutaneous catheter

Regulatory Class: Class II Product Code: LIT, DQY Dated: October 28, 2011 Received: October 31, 2011

Dear Mr. Jacques:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Bram D. Zuckerman, M.D.

M. H. Hillelranne

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

### Indications for Use Statement

510(k)	Number
(if kno	wn)

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**Device Name** 

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vasculature.

Prescription Use \_\_X\_ (Per 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use (Per 21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Division Sign-Off)
Division of Cardiovascular Devices

M. & Willeman

510(k) Number K112697

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